AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-15 (cancelled).

16. (New) A method for producing a micromechanical component, the component being constructed of two functional layers, the two functional layers being patterned differently using micromechanical methods, the method for producing comprising:

applying a first etch stop layer having a first pattern to a base plate;

applying a first functional layer to the first etch stop layer and to first contact surfaces of the base plate;

applying a second etch stop layer having a second pattern to the first functional layer;

applying a second functional layer to the second etch stop layer and to second contact surfaces of the first functional layer;

applying an etching mask to the second functional layer; and

patterning the second functional layer and the first functional layer at least one of: i) by use of the first etch stop layer and the second etch stop layer by etching methods, and ii) by use of the first etch stop layer and the second etch stop layer as sacrificial layers.

17. (New) The method as recited in claim 16, wherein the micromechanical component is a fluid application having cavities.

18. (New) The method as recited in claim 16, further comprising:

removing the second functional layer down to the second etch stop layer in conformance with the etching mask; and

removing the first functional layer down to the first etch stop layer in conformance with the second pattern of the second etch stop layer which is used as the second etching mask.

19. (New) The method as recited in claim 16, the base plate is patterned from an underside of the base plate, and the first etch stop layer is removed in predefined areas as a sacrificial layer

in an etching procedure, the predefined areas extending between the first functional layer and the base plate.

20. (New) The method as recited in claim 16, wherein a lateral limitation of underetching of the first etch stop layer is achieved by the first functional layer, which is situated bordering on determined areas in the first contact surfaces on the base plate.

21. (New) The method as recited in claim 18, wherein the first etch stop layer is removed as a sacrificial layer in determined areas via openings in the first functional layer.

22. (New) The method as recited in claim 19, wherein the first etch stop layer is etched away before the patterning of the first functional layer via openings of the base plate; and only after the first etch stop layer is etched away, the first functional layer is patterned from a side of the second etch stop layer.

23. (New) The method as recited in claim 16, further comprising:

applying an anti-bonding layer to movable parts of the second functional layer or to corresponding areas of a cover plate; and

sealingly connecting the cover plate to an upper side of the second functional layer, using an anodic bonding method.

24. (New) The method as recited in claim 16, further comprising:

applying an anti-bonding layer to an underside of movable parts of the base plate, which faces a bottom plate, or to corresponding areas of the bottom plate; and

sealingly connecting the bottom plate to the base plate using an anodic bonding method.

25. (New) The method as recited in claim 16, wherein a layer sequence made up of a lower first silicon oxide layer, a middle polysilicon layer and an upper second silicon oxide layer is applied as the first etch stop layer.

26. (New) The method as recited in claim 16, wherein a micropump is produced, and wherein the method further comprises:

after the patterning the first functional layer and the second functional layer, removing the first etch stop layer in an area of the intake valve, the outlet valve and in the area of the pump chamber, so that movable parts are formed out of the first functional layer.

27. (New) The method as recited in claim 16, wherein the base plate is patterned from an underside for the development of an inlet channel for an intake valve, for development of an outflow channel for an outlet valve, and for development of a pump chamber.

28. (New) A micropump, comprising:

a pump chamber bordered by a cover plate and a pump diaphragm; and

a pump diaphragm held on a base plate, a fluid being able to be sucked in via an intake and being able to be passed out via an outlet by a movement of the pump diaphragm;

wherein the pump diaphragm is formed from a polysilicon layer.

29. (New) The micropump as recited in claim 28, wherein an intake valve is provided as the intake, the intake valve having an inlet channel that is developed in the base plate, the intake valve being developed as a check valve having a first closing element, the first closing element being developed as a part of the polysilicon layer; and wherein the first closing element is situated above an inlet opening of the inlet channel and covers the inlet opening, and as a sealing seat for the first closing element, an area of the base plate is provided that surrounds the inlet opening.

30. (New) The micropump as recited in claim 28, wherein the polysilicon layer has a lesser thickness in predetermined areas, the predetermined area, including areas of at least one of the intake, the outlet, and the pump diaphragm; and wherein the polysilicon layer is at a distance from the base plate in the predetermined areas.

31. (New) The micropump as recited in claim 29, further comprising:

a cover plate; and

an anti-bonding layer inserted between a second closing element of an outlet valve of the outlet and the cover plate, the cover plate being anodically bonded, wherein the second closing element is preloaded as a sealing surface by the anti-bonding layer against the cover plate.